

A significant difference between proposed BPL systems and previous devices covered by the FCC Part 15 rules is the non-local nature of background noise enhancement. Unlike RFID and other short-duration radiators, BPL systems will be widely spread geographically, connected to effective antennas, and radiating continuously. As a result, it is not sufficient to base RF emission limits on local measurements of individual BPL lines or devices. The real damage to existing HF communications may come not from the closest BPL system but from the combined low-level noise of many systems throughout a wide area. In this case effective interference mitigation will be nearly impossible because there will not be a single, well-defined source of the interfering radiation.